Application No. 10/534,411 Amendment dated February 28, 2008

Office Action of December 4, 2007

AMENDED SET OF CLAIMS

Please amend the claims as follows:

1. (Withdrawn) A method for producing a porous film, comprising the steps of casting a

polymer solution comprising a polymer onto a substrate to form a film; and subjecting the film to

phase conversion to thereby form a porous film, wherein the polymer constituting the porous

film has a surface tension Sa [mN/m], wherein the substrate has a surface tension Sb [mN/m],

and wherein Sa and Sb satisfy the following condition: Sa-Sb≥-10.

2. (Withdrawn) The method for producing a porous film according to claim 1, further

comprising the steps of casting a solution mixture as the polymer solution onto the substrate to

form a film, and subjecting the film to phase conversion by bringing the film to a solidifying

liquid to thereby form a porous film, the solution mixture comprising 8 to 25 percent by weight

of a polymer component for constituting the porous film, 10 to 50 percent by weight of a water-

soluble polymer, 0 to 10 percent by weight of water and 30 to 82 percent by weight of a water-

soluble polar solvent.

3. (Withdrawn) The method for producing a porous film according to one of claims 1

and 2, further comprising the steps of holding the cast film in an atmosphere at a relative

humidity of 70% to 100% and a temperature of 15°C to 90°C for 0.2 to 15 minutes, and bringing

2

the film to a solidifying liquid comprising a nonsolvent for the polymer component.

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Docket No.: 3273-0202PUS1

Docket No.: 3273-0202PUS1

4. (Currently Amended) A porous film having a large number of continuous micropores,

wherein the film has a thickness of 5 to 200 µm, has an average surface pore size A of 0.7 to 10

um and an average surface porosity C and has an average inside pore size B and an average

inside porosity D,

wherein the ratio A/B of A to B is in the range of 0.3 to 3, and

wherein the ratio C/D of C to D is in the range of 0.7 to 1.5, and

wherein a polymer component forming the film comprises at least one selected from a

group of amide-imide polymers, imide polymers, polyethersulfones, polysulfones, acrylic

polymers or cellulose acetate, and

wherein a Gurley permeability of the porous film is from 0.2 to 29 seconds per 100 cc.

5. (Currently Amended) A porous film having a large number of continuous micropores,

wherein the film has a thickness of 5 to 200 µm, has an average pore size A<sup>1</sup> of 0.7 to 10

um at one surface, an average pore size A<sup>2</sup> of 0.7 to 10 um at the other surface, an average

porosity C<sup>1</sup> of 48% or more at one surface, and an average porosity C<sup>2</sup> of 48% or more at the

other surface.

wherein the ratio  $A^1/A^2$  of  $A^1$  to  $A^2$  is in the range of 0.3 to 3, and

wherein the ratio C<sup>1</sup>/C<sup>2</sup> of C<sup>1</sup> to C<sup>2</sup> is in the range of 0.7 to 1.5, and

wherein a polymer component forming the film comprises at least one selected from a

group of amide-imide polymers, imide polymers, polyethersulfones, polysulfones, acrylic

polymers or cellulose acetate, and

wherein a Gurley permeability of the porous film is from 0.2 to 29 seconds per 100 cc.

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6. (New) The porous film according to claim 4, wherein the Gurley permeability of the

porous film is from 1 to 25 seconds per 100 cc.

7. (New) The porous film according to claim 4, wherein the Gurley permeability of the

porous film is from 1 to 18 seconds per 100 cc.

8. (New) The porous film according to claim 5, wherein the Gurley permeability of the

porous film is from 1 to 25 seconds per 100 cc.

9. (New) The porous film according to claim 5, wherein the Gurley permeability of the

porous film is from 1 to 18 seconds per 100 cc.

Docket No.: 3273-0202PUS1